

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A device for needle-free injection of a medium into the tissue of a human or an animal, comprising a needle-free pre-injection device comprising a first chamber accommodating a pre-injection medium for production of a high-pressure jet of ~~a~~ the pre-injection medium for producing an injection channel by means of a high pressure and a small volume, and a main injection device comprising a second chamber accommodating a medium to be injected, the medium being injected for introduction of the medium to be injected, with a great volume and a low pressure in comparison with the volume and pressure of the pre-injection device;

wherein a nozzle intended to be set onto the skin is connected with the chamber of the pre-injection device and with the outlet of the main injection device by way of a kick-back valve, and wherein a pressure-production device that is connected with the chamber of the pre-injection device is configured to produce a high-pressure jet from the nozzle that penetrates the tissue, whereby the chamber of the pre-injection

device has a volume sized exclusively for producing an injection channel in the tissue, and the chamber of the main injection device has a volume intended for the medium to be injected.

Claim 2 (canceled).

Claim 3 (currently amended): The device as recited in claim 1, wherein the chamber of the main injection device accommodating a predetermined amount of the medium to be injected has a piston that can be moved by hand.

Claim 4 (previously presented): A device for needle-free production of an injection channel in the tissue of a human or an animal, for introduction of a medium to be injected into the tissue, wherein a pre-injection device is provided ahead of a main injection device that contains the medium to be injected, wherein a chamber of the pre-injection device provided for accommodation of a pre-injection medium has a nozzle intended to be set onto the skin, and the pre-injection device has a pressure-production device for producing a high-pressure jet of the pre-injection medium that exits from the nozzle, and wherein

the chamber has a volume sized exclusively for producing the injection channel.

Claim 5 (currently amended): The device as recited in claim 4, wherein the pre-injection device has a coupling device for a connection with ~~a~~ the main injection device that contains the medium to be injected.

Claim 6 (currently amended): The device as recited in claim 1, wherein the pressure-producing device of the pre-injection device has a movable pressure plate biased by a spring force, or a biased pressure piece, wherein the movable pressure plate is pressed into the pre-injection device.

Claim 7 (currently amended): The device as recited in claim 1, wherein the pre-injection device has a channel connected with the nozzle at one end and the chamber of the main injection device containing the injectable medium at the other end.

Claim 8 (currently amended): The device as recited in claim 1, wherein a kick-back valve is disposed within the channel below the connection to the chamber of the pre-injection device.

Claim 9 (currently amended): The device as recited in claim 1, wherein a trigger of the pre-injection device holds a movable pressure plate biased by a spring or a pressure piece in its base position.

Claim 10 (currently amended): The device as recited in claim 1, wherein the trigger is connected with the chamber of the pre-injection device and is configured to release the movable pressure plate above a planned pressure.

Claim 11 (currently amended): The device as recited in claim 1, wherein a membrane is part of the piston, with which the chamber of the injection medium is connected, and this membrane is deflected in the direction of a pusher to activate activates the trigger by way of a the pusher.

Claim 12 (currently amended): The device as recited in claim 1, wherein the channel has a connection with the chamber of the injection pre-injection medium, and wherein the kick-back valve is disposed between the connection and the coupling device.

Claim 13 (currently amended): The device as recited in claim 1, wherein the chamber has a piston that rests against the

movable pressure plate and can be displaced in length, and wherein the channel is guided through the piston and the movable pressure plate.

Claim 14 (previously presented): The device as recited in claim 1, wherein the main injection device and the pre-injection device have a common nozzle.

Claim 15 (currently amended): The device as recited in claim 1, wherein a trigger of the pre-injection device can be indirectly activated by the pressure produced by the main injection device deflecting the membrane in the direction of a pusher.

Claim 16 (currently amended): The device as recited in claim 1, wherein the pre-injection device and the main injection device have a common chamber for accommodating the medium to be injected, and a common pressure-production device, and wherein the pressure-production device has means for reducing the size of a first, slight part of the chamber in a first step, by a small volume, at a great pressure, and, in a second step, by a great volume, at a low pressure, and wherein the common pressure-production device has a single spring and damping means.

for damping the movement of a piston that delimits the common chamber, said damping means comprising a piston rod having a damping disk that stands opposite a fixed damping track.

Claim 17 (canceled).

Claim 18 (previously presented): The device as recited in claim 1, wherein the common pressure-production device has two springs having different spring stiffness values and spring paths, whereby a first spring element for moving the piston in the first step has a high spring stiffness and a short spring path, while a second spring for moving the piston has a low spring stiffness and a long spring path.

Claim 19 (previously presented): The device as recited in claim 1, wherein the pre-injection medium is a physiologically non-problematic liquid.

Claim 20 (previously presented): The device as recited in claim 1, wherein the pre-injection medium is the medium to be injected or an anesthetic.

Claim 21 (canceled).

Claim 22 (previously presented): The method as recited in claim 25, wherein the introduction of the medium to be injected directly follows the production of the injection channel, and wherein a minimum pressure is applied during introduction of the medium to be injected, to maintain the injection channel.

Claim 23 (previously presented): The method as recited in claim 25, wherein the production of the injection channel takes place at a high pressure and a low volume, and wherein the introduction of the medium to be injected takes place at a high volume and a low pressure.

Claim 24 (previously presented): The method as recited in claim 25, wherein the pressure for producing the injection channel is applied by means of spring force, and wherein the pressure for injection of the medium to be injected is applied manually.

Claim 25 (currently amended): A method for needle-free injection of a medium into human or animal tissue comprising the steps of:

(a) providing a device comprising a needle-free pre-injection device comprising a first chamber accommodating a pre-

injection medium for production of a high-pressure jet of a the
pre-injection medium for producing an injection channel with a
high pressure and a small volume and a main injection device.
comprising a second chamber accommodating a medium to be
injected, the medium being for introduction of the medium to be
injected with a great volume and a low pressure in comparison
with the volume and pressure of the pre-injection device;

(b) first producing the high-pressure jet of the pre-injection medium via the needle-free pre-injection device;

(c) producing the injection channel with the high-pressure jet; and

(d) subsequently introducing the medium to be injected into the tissue through the injection channel;

wherein a nozzle intended to be set onto the skin is
connected with the chamber of the pre-injection device and
with the outlet of the main injection device by way of a
kick-back valve, and wherein a pressure-production device that is
connected with the chamber of the pre-injection device is
configured to produce a high-pressure jet from the nozzle that
penetrates the tissue, whereby the chamber of the pre-injection
device has a volume sized exclusively for producing an injection
channel in the tissue, and the chamber of the main injection
device has a volume intended for the medium to be injected.